

WHAT IS CLAIMED IS:

1. A recording layer of a magneto-optical storage medium, comprising:

a recording layer on which information is recorded and stored; and

a sublayer formed above or below the recording layer, the sublayer being made up of an alloy containing a transition metal,

wherein a magnetic anisotropy energy of the sublayer is exchange-coupled to the recording layer, thereby enhancing a coercive force of the recording layer.

2. The recording layer as claimed in claim 1, wherein the sublayer is formed in a multi-layered structure having a plurality of layers.

3. The recording layer as claimed in claim 1, wherein the sublayer is made up of an alloy containing a transition metal used for the recording layer.

4. The recording layer as claimed in claim 1, wherein the recording layer is made up of TbCoFe.

5. The recording layer as claimed in claim 4, wherein the sublayer is made up of an alloy containing one of Fe, Co, and Ni.

6. The recording layer as claimed in claim 5, wherein the sublayer is formed in an fct (face centered tetragonal) structure that has a big magnetic anisotropy.

7. A method for fabricating a magneto-optical storage medium having a sublayer, comprising steps of:

forming the sublayer made up of an alloy containing a transition metal;

forming a recording layer on which information is recorded and stored; and

performing thermal treatment on the sublayer,

wherein a crystalline structure of the sublayer is changed into a crystalline structure that has a big magnetic anisotropy by the step of performing the thermal treatment, so that a magnetic anisotropy energy of the sublayer is coupled to the recording layer.

8. The method as claimed in claim 7, wherein the sublayer is made up of an alloy containing a transition metal used for the recording layer.

9. The method as claimed in claim 7,

wherein the recording layer is made up of TbFeCo, and

wherein the sublayer is made up of an alloy containing one of Fe, CO, and Ni.

10. The method as claimed in claim 9,
wherein the recording layer is made up of TbFeCo,
wherein the sublayer is made up of FePt, and
wherein a temperature in the step of performing thermal treatment is
in a range of 300 to 500 °C.

11. A method for fabricating a recording layer of a magneto-optical storage medium having a sublayer, comprising steps of:

forming a sublayer made up of an alloy containing a transition metal;
performing thermal treatment on the sublayer; and
forming the recording layer on which information is recorded and
stored,

wherein a crystalline structure of the sublayer is changed into a
crystalline structure that has a big magnetic anisotropy by the step of
performing thermal treatment, so that a magnetic anisotropy energy of the
sublayer is coupled to the recording layer.

12. The method as claimed in claim 11, wherein the sublayer is
made up of an alloy containing a transition metal used for the recording layer.

13. The method as claimed in claim 11,
wherein the recording layer is made up of TbFeCo, and
wherein the sublayer is made up of an alloy containing one of Fe, CO,
and Ni.

14. The method as claimed in claim 13,
wherein the recording layer is made up of TbFeCo, and
wherein the sublayer is made up of FePt, and
wherein the temperature in the step of performing thermal treatment is
in a range of 300 to 500 °C.